Towards Responsive, Engaging, Active, and Tailored Education

TOWARDS RESPONSIVE, ENGAGING, ACTIVE, AND TAILORED EDUCATION

An Agenda for Educational Reform in the EHEA

A CREATES POSITION PAPER

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With

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About CREATES

CREATES (Creating Responsive, Engaging, Active and Tailored Education with Students) is an ERASMUS+ Strategic Partnership between educators at Leuphana University Lüneburg, the University of Freiburg, Maastricht University, King's College London, Sciences Po, and Scuola Superiore Sant'Anna di Pisa. The CREATES partners share a belief in the importance of student-centred and co-creative education. The main goal of the partnership is to develop, exchange and promote best practices in undergraduate education, especially related to activating teaching methods and student guidance, to thereby advance student-centred higher education in the European Higher Education Area. The partnership has produced four toolkits containing educational tools and strategies, an academic paper summarising scientific evidence regarding the value of this approach, a position paper explaining the approach and its merits, and a policy paper discussing policies to encourage institutions to adopt it. The partnership has also organised a series of training events for staff and students from the participating institutions, along with several multiplier events for representatives from other universities and the higher education community.

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1 Introduction

Europe has great ambitions for modernisation in higher education. The European Union, national governments and institutions alike have proclaimed that it is of paramount importance to rethink university education. The CREATES partners believe that, regardless of how Europe will evolve in the next decades, all graduates of higher education need to be creative and innovative, collaborate with others, and make informed decisions about their own development and that of their societies. Preparing students for a social, civic and economic life, in which they develop and apply their talents to the full, requires a new approach to teaching.

Higher education programmes in which students are mainly taught through teacher-centred pedagogies and are given only very limited freedom to customise their curriculum are no longer fit for purpose. Rather, students must be conceived of as active co-creators of their education, both in how they study and what they study. Realising this vision will require significant reform of teaching and learning, facilitated by a drastic change in the culture of higher education institutions. Only then can Europe's ambitions for higher education be realised.

The CREATES strategic partnership, funded under the ERASMUS+ programme, consists of educators at universities that seek to support this transformation, by developing and sharing a range of best practices and educational toolkits. They aim to demonstrate how this evolution towards a more engaging, active and tailored education can be achieved. CREATES hopes to inspire and encourage higher education institutions throughout Europe to reform their educational programmes and to enable students to develop five competencies that the CREATES partners deem particularly important. These are: *Agency* (the ability to make choices, take action and shape one's surroundings and future), *Analytical Thinking* (the ability to process information in a structured, rigorous and reflective way), *Creative Thinking* (the ability to apply multiple disciplinary perspectives to the articulation and solution of complex problems in innovative ways), *Engaging with Others* (the ability to participate effectively and responsively in collective endeavours), and *Learning to Learn* (the ability to learn effectively, by consciously setting learning goals and adapting one's learning to changing situations and challenges). To do so, institutions must adopt more active, engaging pedagogies, and they must provide better forms of academic and pastoral advising to help students navigate their education.

This position paper makes the case for the CREATES approach to higher education; it seeks to make an argument for why institutions should make use of the resources CREATES has produced. In section 2, it explores key social, economic and civic challenges that citizens, both now and in the future, have to face. Section 3 considers the role of universities in preparing students for their futures and why a teacher-centred conception of higher education does not work as well as more active and engaging conceptions of higher education. Section 4 presents an overview of recent higher education policies, demonstrating that there is widespread

consensus about the need to make education in the European Higher Education Area (EHEA) more student-centred and co-creative. Section 5 offers some key facts and major trends relating to teaching and learning in the EHEA,[1] concluding that ambitions are far from met, and that much of European higher education is not as responsive, engaging or active as is deemed desirable. Section 6 then presents the CREATES approach to reform and explains how it can be applied to enable higher education in Europe to better equip students for their futures, by introducing the four toolkits that have been produced by the CREATES partners.

[1] It goes without saying that, within the confines of this position paper, we can only draw a tentative sketch of the status quo of teaching and learning in the EHEA, given the size, scope, complexity and diversity of higher education in the 48 member countries.

2 Social, economic, and civic developments in Europe

Regardless of differences in theoretical and political perspectives, there is a broad consensus that today's and tomorrow's European students will live and work in radically different societies.[2] Some of the key challenges affecting Europe are digitalisation, globalisation, world-wide public health threats, climate change, growing inequalities, and social and cultural challenges to social cohesion. As societies become more complex and political systems more volatile, graduates will be expected to participate in a whole range of civic activities, which are required to sustain European democracy and to deal with major European civic challenges (European Commission, 2017c). As labour markets will be dynamic, graduates will need to be adaptable. Lastly, future European citizens will need to take an active role in managing their personal affairs, making good choices for their futures in order to lead satisfying lives. To deal with these challenges, students will need to develop a specific set of skills and competencies.

2.1 The social domain

In many societies in Europe, people are free to lead their own lives in their own way, but they are also expected to take responsibility for their lives. Most European countries are tolerant of different lifestyle choices. People have many options to choose from in education, personal relationships and hobbies. However, this freedom is also a burden, as it can consume significant mental resources and can cause considerable uncertainty. To optimally make use of it, individuals must have the mental ability to weigh options and reflect on their values.

There is also an institutional component to this. In many European countries, governments expect people to take more responsibility for themselves. The likely result of recent demographic and economic trends and increasing liberalisation will be a substantial reduction in the collective provision of education, healthcare, childcare, social support, and pensions. Even the most generous welfare states no longer care for people from cradle to grave (Ellison, 2006). This means individuals are expected to take a more active role in providing for themselves throughout their lives. To do so, they must make their own choices about what they value, engage in careful planning, not least regarding their finances, and be able to live with the consequences of their choices.

Navigating such a society, with both its increased freedom and its increased burden of responsibility, is not easy. Doing so successfully requires an ability to reflect on one's strengths

[2] For a discussion of major trends affecting Europe, see Gaub, 2019. For a discussion of the relevance of these trends for education, see OECD, 2019b.

and weaknesses, one's values, and one's ambitions, but also to consider which choices are most conducive to realising them. This requires a great deal of agency.

2.2 The economic domain

The labour market is rapidly evolving in several respects. Firstly, many high-value jobs, which are key to sustaining economic prosperity in a competitive global landscape, are becoming more complex. As the world's economies have become more interlinked, the number of stakeholders, risks, and opportunities that need to be considered has also increased. Businesses, NGOs and governments must take into account the consequences of their actions for the environment, the climate, public health, poverty, and for the lives of people from many different cultures and backgrounds. Analytical and creative thinking as well as intercultural skills are essential for doing so.

Furthermore, many simple, routine tasks, which before the digital revolution had to be carried out or monitored by humans, have increasingly been automated, for example using artificial intelligence and sophisticated forms of digitalisation.[3] As a result, the labour market for higher educated workers has shifted away from jobs that are primarily about executing tasks in accordance with pre-set rules, to jobs that are centred around innovation, creativity, and problem-solving that involve trade-offs between multiple stakeholders and values. For this reason, participants in the economy must take a much more active approach to their work, which requires both analytical and creative thinking as well as agency. People cannot exclusively rely on systems of knowledge and rules they were once taught and apply these throughout their careers. Rather, more and more, they have to reflect on their actions and their effects on different stakeholders, create new knowledge, and make decisions based on their own judgments. Moreover, many projections show that technological change is ever accelerating, requiring employees to update their skills on a regular basis. To do so, they must learn to learn.

The careers of individual labour market participants have also changed. Students entering the workforce today are likely to have multiple jobs, with different organisations (including ones they create themselves), in different sectors and industries, and in different locations. Their career paths are likely to be much more varied and of their own making. However, at the same time, their positions in the economy might often be quite precarious. To deal with this, people require an ability to reflect on their own career goals and ambitions and to take initiative to realise them. They also require a greater degree of flexibility, the ability to adapt to changing contexts and to engage in life-long learning. As such, future employees and entrepreneurs must take a much more active approach to their careers. They cannot simply

[3] For a recent overview of scientific research on the impact of technology and digitalisation on the labour market, see Gonzalez Vazquez et al., 2019; High-Level Expert Group on the Impact of the Digital Transformation on EU Labour Markets, 2019; Bladh, 2019; Kuzminov, 2019.

seek an entry-level job at a certain organisation, and follow an established path. They will need to make reflective and strategic choices at every turn. This requires agency.

Lastly, the social nature of the workplace itself is changing as well. Organisations, both in the private and the public sectors, are becoming much more international and multicultural. Work quite often takes place in agile teams, in which responsibilities are shared and tasks carried out collectively. Hence, future employees must be able to work together with different people in constructive and professional ways, both on the shop floor and in the economy at large, by actively engaging with others.

2.3 The civic domain

Twentieth-century European history shows dramatically that democratic governance is inherently fragile. While much has changed, the present situation in Europe clearly shows signs of fragility. Democratic governance is not only a matter of having appropriate laws and institutions. Increasingly, it is becoming apparent that an engaged citizenry is key to a flourishing democracy.[4] After all, the essence of democracy is citizens collectively shaping their communities. Yet, like the workplace, these communities are becoming increasingly diverse and multicultural. This means that citizens will have to work together with people with whom they may have less in common than they once did. This cannot happen if they do not engage with each other, also across national borders, in seeking solutions to their common problems. As is often noted, in democracy, decisions are made by those who show up. If citizens do not bother to do so, democracy cannot function. In short, democracy requires mutual responsibility. This is particularly important in the context of the large civic challenges Europe faces today, including ecological sustainability, growing social inequality, threats to social cohesion, and globalisation. If democracies do not function well, they are unlikely to be able to optimally cope with these challenges.

As democratic actors, citizens must be able to participate in public debates in an informed way, take a critical attitude to information, whether it comes from their governments, politicians, or the media, and vote in a considered, well-informed way. This is particularly important in an age of social media, niche broadcasters, and fake news. If citizens can easily be swayed to believe what powerful interests wish them to believe and be made to act or vote on the basis of those beliefs, then democracy is in peril. As such, democracy requires analytical thinking. But a thriving democracy also asks people to engage at a local level, to participate in civic associations, grass-roots campaigns, planning processes and the like. This requires that they learn to be active agents, who have confidence in their ability to shape their surroundings, rather than passive consumers of information, who are socialised into following instructions without question. It also requires the ability to engage with others, including those with different backgrounds or perspectives.

[4] For a discussion of the importance of civic engagement for the future of the European Union, see Brande, 2017.

3 The role of higher education in the coming decades

As section 2 has argued, future European citizens and participants in the economy need various skills and competencies to thrive in our rapidly changing world. They will need to be highly active and engaged in their careers, communities and personal lives. They will also have to make choices in these domains, relying on their own judgment. Moreover, they must be able to think analytically and creatively.

Higher education has an important role to play in helping students to cultivate these abilities. After all, higher education exists to prepare future generations for meeting the challenges they will face as individuals. Hence, education cannot be limited to merely instructing students in particular academic disciplines or train them for certain predefined professions. The vast majority of graduates will not become researchers, and most graduates end up in occupations not directly linked to their study programmes. Nor is becoming employed the only significant challenge students will face in their lives. Failure to develop the crucial competencies during early adulthood can severely limit one's opportunities later in life, on the labour market, but also in one's personal and civic life. Of course, young people develop and learn in many different contexts, such as the family, primary and secondary schools, or clubs and associations. As such, higher education does not have sole responsibility for helping students acquire the relevant competencies. However, students enter higher education exactly around the time that they become adults and become responsible for their own lives. Moreover, higher education is well placed to foster these competencies. Hence, it seems appropriate and fruitful to make enhancing these abilities an important aim of higher education. While this position paper is only concerned with higher education, it goes without saying that every individual should be enabled to develop these competencies in an appropriate environment, whether it be vocational training or secondary education. Indeed, the principles behind the CREATES approach can also be applied to those contexts.

However, much higher education in Europe is not particularly well suited to cultivating active and engaged citizens who possess the ability to make good choices. Many university programmes offer highly teacher-centred pedagogies, with little room for student initiative (ESU, 2015). Rather, students are perceived as passive consumers of education, who are expected to internalise knowledge, and then to reproduce this knowledge in the context of exams that are focused on regurgitating facts and applying existing theories. They cannot actively pursue their own questions, select their own literature to study, or decide which problems they are most interested in solving. Nor are there many opportunities for group work or collaborative learning.

Moreover, in many higher education programmes in Europe, students cannot significantly shape their course of studies in ways that fit their personal and academic development. Rather, they must follow a pre-arranged curriculum in a pre-determined order, and as such rarely have to make choices about their education beyond deciding which programme to enrol in. As a result, apart from the often-tantalising decision of which programme or institution to select, students, once enrolled, do not have much occasion to reflect on their

studies and how they relate to their personal development or future ambitions. In turn, little importance is given to providing students with individual guidance on how to navigate their way through the university, or how to make the best use of the opportunities available to them. They are expected to go with the flow, in a one-size-fits-all approach.

It seems obvious that such an approach hardly fosters an active and engaged attitude towards a messy and complex world and it does not contribute to an ability to make good choices reflectively. Students who are simply expected to internalise knowledge through repetition, without much self-directed involvement or freedom, are likely to become disengaged and will not develop the ability to shape their own paths. Hence, a different approach to education is required. If students are to become active and engaged, their education should also be activating and engaging. Similarly, if students are to learn how to shape their own paths and make well-informed choices for their futures, they should be expected to do so during their education and be supported along the way. This is not merely a matter for highly selective, elite institutions. The social, economic, and civic challenges of the future belong to all members of society, and hence educational reform should be sector-wide. Indeed, modernising higher education to make it more student-centred and co-creative is particularly important for large institutions that serve populations that, by virtue of their socio-economic position, will be most affected by future developments. One might think that large institutions are by definition incapable of providing this kind of education, but the CREATES toolkits offer a range of strategies that universities of all sizes can use to do so.

Seismic change in the culture of higher education is essential if higher education institutions are to survive and thrive in the future. Due to demographic trends in many European countries, the competition for students will become more severe, especially for the most able students who seek high-quality education that will give them a competitive edge in the labour market. Institutions that cannot attract sufficiently talented students will become unsustainable, both in the education they provide and the research they conduct, as these students will become the researchers of tomorrow and are also crucial for institutions to attract highly qualified professors. Moreover, current high levels of student dropout, study delay, and mismatches between the competencies of students and the requirements of the labour market put pressure on budgets and the legitimacy of European public higher education, especially as students are expected to bear an increasing fraction of the cost of their education (OECD, 2019a, p.29).

4 Policy priorities for the future of higher education in Europe

It is widely accepted that developments in European societies like the ones described in section 2 necessitate a significant change in how higher education is conceived, organised and delivered. Other analyses of contemporary social developments support the call for change in higher education.[5] Just as there is a consensus on the ills, one can also find, more surprisingly, a broad consensus as to the cure, both among organisations such as the EU, the OECD, and the European University Association (EUA), and among higher education institutions themselves: namely, that a more student-centred and co-creative higher education system is necessary to prepare students for the realities of living and working, now and in the near future. This section discusses the main policy goals and ambitions that have been articulated for European higher education in the past 25 years. It demonstrates that there is a remarkable consensus regarding the need for reform, the competencies that students need to develop and the way to achieve change.

4.1 Bologna Process: from structural reforms to the quality of teaching and learning

The need to reform higher education was already perceived during the 1990s. With the advent of mass higher education in Europe, policymakers and educators became concerned about increasing dropout rates and slow progress, decreasing contact between staff and students, and a mismatch between what students were learning and the demands of the labour market and society at large.

The Bologna Process is undoubtedly the central educational reform process within the EHEA. It was launched at the turn of the millennium to provide an overall framework for reforming and streamlining the higher education institutions of Europe. The main goals are a common higher education structure of three cycles, mutual recognition of qualifications, and coordinated processes of quality assurance. Initially, the Bologna Process was mainly focused on restructuring programmes and harmonising credit systems. Gradually, the need to go beyond primarily structural and administrative reform, which proved to be one of the key points of criticism, became apparent. During the process, new goals have been added, such as equal access, lifelong learning, and employability, in response to debates in member states and the higher education sector.

[5] For an in-depth analysis of why current higher education programmes do not prepare for a complex and messy world, see Elkana and Klöpper, 2016.

Importantly, the Yerewan Communiqué of 2015, adopted at the EHEA ministerial conference in Yerewan, makes improvement in learning and teaching an explicit and central priority (EHEA Ministerial Conference, 2015; see also: EURYDICE, 2018, p.47; High Level Group on the Modernisation of Higher Education, 2013, p.5, p.22). After 15 years of emphasising structure and quantitative targets, Yerewan marked a remarkable turn towards the quality and relevance of education. The EU ministers acknowledged that higher education programmes should "enable students to develop the competencies that can best satisfy personal aspirations and societal needs, through effective learning activities." These should be "student-centred, actively involving students in curriculum design, include flexible learning paths, promote a stronger link between teaching, learning and research, and provide incentives to intensify activities that develop creativity, innovation and entrepreneurship." The communiqué deems these aspects of teaching and learning to be of paramount importance in preparing students for European economies, but also in equipping citizens to deal with the environmental, social, political, and cultural challenges Europe faces.

The Paris Communiqué (EHEA Ministerial Conference, 2018a) and the Statement of the Fifth Bologna Policy Forum (EHEA Ministerial Conference, 2018b), both issued in May 2018, later stressed social inclusion and widening access, retention, and employability for all students and graduates. Furthermore, the EHEA council of ministers emphasised that higher education institutions should, on top of their economic function, "play a stronger social, cultural, and leadership role and foster social cohesion by providing students with values, skills, and aptitudes that promote civic participation, social inclusion, sustainability, and global citizenship." (EHEA, 2018) Cooperation in innovative learning and teaching practices was deemed pivotal in modernising higher education. Key were the dissemination of student-centred and co-creative learning practices, building on existing good practices, and the development of interdisciplinary programmes, creating opportunities for flexible, more personal learning.

4.2 Higher education policies on teaching and learning within the European Higher Education Area

Universities in the EHEA are confronted with different financial, economic, social, cultural, and political realities, and their incentives to develop and implement policies vary. However, it is clear that throughout the EHEA, there is a shared belief that reform in higher education is required and that there should be more emphasis on a student-centred and co-creative approach to education that promotes agency, engagement with others, and analytical and creative thinking. The next two sections provide a brief bird's eye view of current policies pertaining to this ambition (EUA, 2018; EURYDICE, 2018).

European Commission

On the European level, one can see that the European Commission (EC) in recent years has taken on an active role in setting agendas relating to higher education. While higher education remains predominantly the responsibility of national or, in some federal systems, subnational governments, the EC clearly attempts to influence this policy domain. Central in

this context are several funding programmes, the most well-known being ERASMUS and ERASMUS+, which aim to foster educational reform. A concise overview of current EC priorities and policies regarding teaching and learning can be found in the *Renewed EU Agenda for Higher Education*, issued in May 2017 (European Commission, 2017a). Within the framework of the Europe 2020 strategy, this agenda stresses the necessity of investing in higher education and lists some priorities for reform. These include:

1. fostering the quality of information for prospective students about higher education and graduate careers,
2. guiding and mentoring students in making choices,
3. engaging students in their education,
4. linking research to education,
5. making the exploration of contemporary issues, including real-world problems, part of the curriculum,
6. ensuring well-organised voluntary and community work,
7. providing work-based learning.

Enhancing the advanced learning skills of all students (including the abilities to think critically and creatively, understand new concepts, and to develop and apply new ideas), research-based teaching, interdisciplinary education, and bringing practice to the classroom are seen as key to modernisation. A shift to student-centred and co-creative education as the main paradigm of higher education is deemed of paramount importance.[6]

To further implementation of this agenda, the European Commission has recently launched the European Universities Initiative, which aims to "bring together a new generation of creative Europeans able to cooperate across languages, borders, and disciplines to address societal challenges and skills shortages faced in Europe" (European Commission, 2019). The EC explains the purpose of this initiative, as follows:

> Demand for highly skilled people is increasing; by 2025, half of all jobs will require high-level qualifications. Education across Europe is rapidly changing as well, with deep technological and structural changes affecting teaching and learning. Beyond their core tasks of teaching, research and innovation, universities are key actors in Europe, able to address big societal challenges, become true engines of development for cities and regions, and promote civic engagement.
>
> The transformation of our universities needs to be accelerated so young people are prepared for the jobs of tomorrow in a fast-changing society, and future generations are empowered to find solutions to big societal challenges that Europe and the world are facing. This transformation should lead to the Universities of the Future. (idem)

[6] In a recent study commissioned by the CULT committee of the European Parliament, scenarios for the education and youth sectors of the EU have been developed. Key in the scenario in which, by 2035, the EU is projected to be competitive, prosperous, socially stable and inclusive, is a substantial investment in personalised, student-centred learning. See Devaux et al, 2019.

The EC's overall assessment is shared by the Organisation for Economic Development and Cooperation (OECD). In 2015, it launched the Future of Education and Skills 2030 project (OECD, n.d.). The OECD recognises that the world is changing ever more rapidly and that higher education needs to change with it to optimally prepare students for dealing with the new reality. It sought to answer the questions what students should be able to do and what they must learn to be optimally prepared for their lives. Through an extensive research process, involving a large number of education researchers, policymakers, school leaders, teachers, and students, it developed the OECD Learning Compass 2030, which serves to guide the further development of higher education in the developed world.

Central to the learning compass are three transformative competencies that the OECD deems to be particularly important in all domains of life:

> *Creating new value*
>
> Creating new value means innovating to contribute to better lives, such as creating new jobs, businesses, and services. It entails developing new knowledge, insights, ideas, techniques, strategies, and solutions, and applying them to problems both old and new. When learners create new value, they question the status quo, collaborate with others and try to think "outside the box".
>
> *Reconciling tensions and dilemmas*
>
> Reconciling tensions and dilemmas means taking into account the many interconnections and inter-relations between seemingly contradictory or incompatible ideas, logics and positions. It also means considering the results of actions from both short- and long-term perspectives. Through this process, students acquire a deeper understanding of opposing positions, learn to develop arguments to support their own position, and find practical solutions to dilemmas and conflicts.
>
> *Taking responsibility*
>
> Taking responsibility is connected to the ability to reflect upon and evaluate one's actions in light of one's experience and education, and by considering personal, ethical and societal goals. (idem)

The OECD deems these competencies crucial for students to develop agency: the ability to shape the world around them and achieve wellbeing for themselves and society at large. It makes clear that a mono-disciplinary, teacher-centred higher education practice is ill-suited to fostering these transformative competencies. The second phase of this OECD project (which started in 2019) seeks to identify how these competencies can best be taught and learnt.

Many institutions in the EHEA enjoy a high degree of autonomy in shaping the education they offer. A large number of them are putting more emphasis in their policies on learning and teaching than before. According to a report on trends in higher education by the EUA based on an extensive survey and interviews, 86% of universities indicate having a learning and teaching strategy (EUA, 2018, pp.22-30; see also EURYDICE, 2018, pp.48-49).

Quite often institutions that have developed an explicit learning and teaching strategy report they were inspired by national or supranational university alliances. One prominent example is the League of European Research Universities (LERU).[7] LERU, drawing on data gathered from a qualitative survey in 2017 among its members, formulates precise and specific measures to be taken at the institutional level to modernise teaching (Fung et al., 2017). It places emphasis on students' active commitment to the learning process, and it deems research-rich curricula and learning communities that practise research and enquiry, both within and across disciplines, as instrumental to engaging students.

However, the most recent EUA position paper (EUA, 2018) still stresses the importance of teaching and learning reform. It emphasises the importance of the active engagement of students in their own learning, a broad and advanced knowledge base, as well as personal development and active citizenship. In particular, it argues that universities should ensure that their learning and teaching activities are geared towards active learning and developing transferable skills, including critical thinking and intercultural skills, which will enable students to take up active roles in society and their professional careers.

This review of policy priorities demonstrates that there is a remarkable convergence on European, national, and institutional levels regarding the vocabulary and phrasing of the main policies and priorities for teaching and learning. There is a consensus that a shift to a more student-centred and co-creative teaching paradigm is required. It is also generally believed that this change can be achieved through greater emphasis on active learning, student choice, and personal development.

[7] LERU includes 24 top-ranked European Research Universities, including CREATES partners University of Freiburg and University College London.

5 The status quo in the EHEA

Despite the consensus that higher education should become much more student-centred and co-creative, many university programmes still adhere to the teacher-centred conception of education and are far from offering responsive, active, and engaging education. Consequently, students are not optimally prepared for their futures. For example, the OECD notes that 30% of graduates in OECD countries do not reach the level of literacy and numeracy they require to carry out the moderately complex information processing tasks that will be crucial in an information-driven society (OECD, 2019a, p 29). Also, worryingly, the EC notes that teaching non-cognitive skills seems to have been neglected across the EU despite their effectiveness in enhancing employability, civic responsibility, and personal development (Gonzalez Vazquez et al., 2019, pp. 40-52). Moreover, data presented in a number of well-researched reports pertaining to the Bologna Process and the development of higher education in the EHEA demonstrate that, despite several hopeful developments, many institutions are far from realising the student-centred goals elaborated in section 4.[8]

5.1 Student-centred learning

Much daily educational practice in Europe is offered in (large) lecture halls within large institutions.[9] One might argue there are no alternatives, given the limited budgets available. However, the CREATES partners believe that a critical analysis of current educational expenditures at the institutional level might reveal that significant improvements in education could be funded by a reduction of overheads, management, administration, and the like. Moreover, investment in more effective learning promises to reduce dropout and increase student progress, thereby paying for itself.

In this context, the European Student Association (ESU) reports that "initiatives and efforts to implement student-centred learning seem to be very sporadic and unevenly distributed across higher education institutions" (ESU, 2018, p.8). Interestingly, despite limited modernisation in day-to-day practice, the EUA trends report establishes a rather high level of institutional

[8] It is important to stress the tremendous variety in how teaching and learning take places at universities throughout Europe, both between countries and within them. However, some general figures can be found in the 2018 Bologna Process implementation report (EURYDICE, 2018), the accompanying document to the 2017 renewed European Committee agenda for higher education (European Commission, 2017b), and the EUA's *Trends 2018. Learning and Teaching in the European Higher Education Area* (EUA, 2018). One should note that the samples studied in the reports differ. The sample in the EUA trends report covers 303 out of approximately 4000 higher education institutions.

[9] Van der Zwaan (2017, p.65) establishes that these massive institutions do not profit from economies of scale anymore and are in an organisational sense suboptimal.

support for engaging in new student-centred and co-creative teaching practices (EUA, 2018, p.54).

5.2 Student advising

If students are to be afforded a certain degree of freedom to co-design their curriculum, support and guidance for making good choices are key. However, the ESU's *Bologna with Student Eyes* (2018) reports an overall decrease in the quality of student services in the last ten years, against the background of growing student numbers and severe cutbacks in budgets. The very conception of student services varies from country to country and from university to university. Still, where structures are in place, these focus mainly on assistance in personal, financial or health matters. The provision of specific academic or pastoral advising aimed at fostering cognitive and intellectual growth, is lacking. Students rate academic counselling as one of the weakest aspects of their programmes in the EUA survey 2018 (EUA, 2018, p.36). This is in striking contrast to higher education in the United States, where pastoral and academic advising is an essential feature of life in many colleges and universities (Cook, 1999). In Europe, the exceptions are Liberal Arts colleges, which deploy academic advisors or tutors to guide individual students (Dekker, 2017).

5.3 Content of programmes

Academic bachelor programmes with an emphasis on specialisation, single disciplines, and supply-driven academic content are dominant. Open or flexible programmes are still rare, while curricular paths tailored to individual learning are nearly non-existent. Freedom of choice is limited to a small number of electives (EUA, 2018, pp 45-48; ESU, 2018, p.8). Options to engage in research, which is crucial to the development of many transferable skills, are even more limited. The EUA 2018 trends report reveals that the fact that bachelor programmes do not include research experience is an issue at 38% of institutions (EUA, 2018, p.54). Moreover, Bunescu and Gaebel claim that often "research results do not feed into teaching," resulting in education that is not state-of-the-art or related to current scientific or social developments (2018, p.38). Instead, laissez-faire and individual course development may be the main drivers of curricular change. A 2013 report by the High Level Group on the Modernisation of Higher Education and the EUA trends report of 2018 claim that modernisation in most cases is based on the initiatives of individuals.

From a bird's eye view of day-to-day practice in the highly diverse EHEA, and assessing it against the ambitions of the EC, national governments and (associations of) universities, one cannot but see a huge gap. Despite the urgency voiced on several policy levels, as described in section 4, teaching and learning in higher education is often still done in accordance with a conception of education that is far removed from the student-centred and co-creative approach that is widely accepted as desirable. In much of higher education, cutting-edge teaching is undervalued. In 2013 the EC's High Level Expert Group, in its report on improving the quality of teaching in higher education in Europe, wrote: "Our research shows a lot of worthy aspirations across EU member states but an actual baseline of concern that is

worryingly low. An over-focus on research has, it seems, overshadowed the core values and seminal importance of teaching" (High Level Group on the Modernisation of Higher Education, 2013, p.22). The debate in the higher education sector about the necessary shift towards a student-centred learning perspective has experienced a boost in recent years from the Bologna Process. However, it is not clear how, if at all, the day-to-day practice of higher education engages students to fully develop their academic talents or equips them for both the labour market and society at large.

6 Towards engaging, co-creative higher education in the EHEA

As sketched in section 2, European societies are changing significantly. It is widely accepted, as sections 3 and 4 described, that students will need to develop new competencies and skills to thrive in these societies. Both organisations, such as the EC, the OECD, and the EUA, but also individual institutions, generally accept that higher education has an important role to play in helping current and future students develop these competencies, and that a teacher-centred, passive conception of higher education is not suited to helping them do so. A more active, student-centred and co-creative approach is required, and there is a remarkable policy consensus within the European higher education establishment on this. However, despite widespread agreement about the direction higher education reform should take and some shining examples of student-centred educational practices, change has been slow, as section 5 showed, and many university programmes still do not offer the kind of active and engaging education that the future requires.

The slow pace of reform no doubt has many causes, including lack of funding, limited institutional capacity and a lack of institutional commitment to teaching compared to research at many universities. However, one important reason may be that the agenda for reform is too diffuse and marked by what can easily be dismissed as catchwords or buzzwords. How can reform be operationalised into a concrete educational philosophy that can be implemented on an institutional and on a programme level? Higher education institutions and educational leaders may simply lack the examples and tools required to translate general goals into concrete educational innovations. Doing so requires identifying a specific set of capabilities that are important, understanding how education can foster them, and having a range of tools to implement this educational vision. The CREATES project aims to contribute to reform in higher education by providing these.

6.1 The CREATES approach

While there is a significant consensus in the policy domain discussed above regarding the capabilities that will be particularly important in the future, it is important to specify exactly which capabilities higher education should focus on. To facilitate reform, these should be formulated on an intermediate level, in terms that are closer to those used within higher education than in policy discourse, but also in language that is more generic than that used to specify objectives and competencies at universities, in, for instance, course and module descriptions.

CREATES conceives of five competencies that students will need to acquire to be able to deal with the challenges discussed in section 2.

Agency

Students need to learn how to shape their own lives and their communities. They need to be capable of solving complex, multifaceted problems, and to be able to take the initiative. They should also acquire the ability to make well-grounded decisions, especially in complex situations, and be able to recover from adversity or adjust easily to change as resilient individuals.

Agency will be of paramount importance in the future. As discussed in section 2, the labour market will demand people who can take the initiative, rather than merely following instructions or rules. Participants in the economic system will need to solve complex problems that require creative solutions based on well-justified decisions. Moreover, as citizens in a democratic society, people will be called upon to stand up for their interests, as well as those of society at large, and to participate in collective decision-making. Due to an increased individualisation in most European societies, they will need to pro-actively shape their own lives and make conscious choices for their careers and future.

Analytical thinking

The need for a careful analysis of information has been voiced strongly in the last decade. The CREATES partners think that students should be able to consider information critically, to think analytically, and to reason and make judgements independently, drawing on their own values and understanding of the world.

Against the background of more individual freedom and ever more information, and with students expected to take a more active approach in their working, civic, and personal lives, it is particularly important that they learn how to process information well. They must be able to be economical and careful with limited attention and time, critically evaluate all the input they receive, and draw conclusions from this information systematically and rigorously.

Creative thinking

Students should be able to apply multiple disciplinary perspectives to help them articulate and solve complex problems in innovative ways. They must have the competency to apply concepts and knowledge from one domain to problems in other fields and to combine insight from various disciplines to a range of social and academic questions.

In a world in which many rule-based activities will be automated, the creation of added value, both within the economy and society at large, will require transcending the borders between disciplines in non-algorithmic ways. Indeed, to do justice to the complexity of wicked and messy problems, in which all solutions are better in some ways and worse in others, future citizens and economic agents must be able to look at problems from many perspectives and synthesise them in innovative and reflective ways.

Engaging with others

Students should be able to participate effectively and responsively in collective endeavours. They should be capable of reflecting on their own role and the roles of others in the context of joint work. They should learn how to communicate carefully and effectively. A particularly

important, but often underestimated, part of engaging with others is listening carefully and closely. Engaging with others also demands an ability to constructively engage with diversity. This ability requires attempting to understand positions and viewpoints that differ from one's own, engaging in conversations across such differences that are marked by civic respect, but also being able to draw lines and judge and reject positions when required.

Engaging with others will be important in the social domain, as well as the economic domain. Both the workplace and society at large are increasingly diverse and require greater cooperation among participants. Students will need to be good colleagues, neighbours and citizens, who can negotiate differences in a congenial fashion.

Learning to learn

Students should learn how to learn effectively, by consciously setting their own learning goals and adapting their learning to changing conditions and challenges. They should come to conceive of learning as an ongoing, never-ending process.

Given the increasing speed with which technology is evolving and the varied nature of careers, students will need to keep learning throughout their lives. Moreover, as citizens, they will need to inform themselves about a wide range of social developments, so that they can contribute to political debates.

These capabilities can be nurtured and cultivated by pursuing an approach to teaching and learning that is responsive, engaging, active, and tailored to students and their interests. Moreover, the CREATES partners emphasises that education should be co-created with students in a constant exchange with educators. As such, it argues for a highly student-centred approach to education that is based on three fundamental pillars.

1. Engaged and active learning by each student

Higher education should engage students in their learning by allowing them to bring their own questions and interests into the learning process. They should be encouraged but also challenged to actively participate in classes, rather than being passive recipients or consumers. In the learning process, students should be stimulated to independently and critically engage with literature and study materials, thereby learning in a reflective, self-aware way. They should also be granted space to adapt their curriculum to their own needs and interests, at least within certain constraints of academic coherence.

2. Communal interaction as the mode of learning

While a focus on the active learning of each student is important, and, indeed, our starting point, genuine learning hardly takes place in 'liberty and solitude' (which is no longer the common mode for much contemporary research either). Higher education needs to occur within an academic community, characterised by intensive interaction among students, but also between students and teachers. Both should be responsive to fellow learners and their needs, and they should engage in dialogue and argumentative debates with each other. This pertains both to institutional arrangements and to classroom practices.

3. Co-ownership and shared responsibility as the ethos of learning

Students should understand the learning process as an endeavour with shared responsibilities and take co-ownership for their own curriculum and their entire education. To enable and promote this, the praxis of higher education should stimulate students to take initiative in the classroom with regards to course content and learning goals. They should learn how to collaborate, understand what it means to take shared responsibility for completing work, and develop a joint sense of ownership of their growth and that of others. This is a matter of the overall ethos in which practices of learning and teaching are embedded.

There are at least two basic levels (or sites) within the educational experience where the approach to teaching and learning advanced by CREATES can be realised. The first level is that of course design and implementation. To this end, CREATES offers an approach to course structure, delivery and assessment that implements the three pillars above. CREATES offers tools that give practical answers to questions about teaching and learning, and which are generic enough to be applicable in various settings and disciplines. The second level is that of support and advising, to help students navigate the overall curriculum and educational environment. At this level, CREATES focuses on advising and guidance, and how advisors may help students make good choices in their education, leading to a better educational experience and improved skills. In particular, CREATES offers tools to help faculty advise students, peers to advise each other, and individuals to self-advise.

6.2 Course design, delivery, and assessment

Engaged learning in a communal context with an ethos of shared responsibility requires an active, co-creative pedagogy. As such, the main challenge is developing teaching and learning practices that put the learning process of the student centre stage. A wealth of research in the education sciences establishes significant positive effects on motivation, retention, effective learning and educational attainment when students play an active role in their own learning. Students must be able to impact the educational process by having input into which questions are examined, how classroom proceedings are conducted, and how literature is studied. With open forms of assessment, which go beyond the mere reproduction of knowledge, they must have the opportunity to look into the issues they find meaningful. In short, they must be given agency over the learning process, which will help them to develop this capacity for their futures.

Moreover, students should take on this agency collectively, as a group or class – through group discussions that shape the educational process, for example, or though collaborative assignments – as this enables them to develop the ability to engage with other people. Group work guarantees an interactive, communal learning experience. In this context, teachers and professors do not present themselves as authorities or bosses to please. Rather, they should act as coaches and mentors who go on an academic journey with their students, ready to provide support as needed by asking probing questions, providing relevant information, and encouraging the group process. Teachers playing this role contributes to a sense of co-ownership and shared responsibility. Furthermore, ensuring students have agency in the

learning process enables them to take a much more active, and therefore critical, approach to the information they encounter. It invites them to draw their own conclusions, fostering analytical and creative thinking. All these features collectively help students to learn for themselves. Treating them as agents, rather than as passive receptacles of knowledge who are unable to learn without instruction, helps to foster life-long learning skills.

Toolkit 1 of the CREATES project provides a range of insights, strategies and tools that can be used to implement such an activating and engaging pedagogy.

6.3 Advising students

Engaged learning in a communal context with an ethos of shared responsibility also happens through advising. The greater emphasis that the CREATES approach places on student agency requires students to be supported as they navigate their educational programmes and make choices about their studies.

Creating adequate forms of academic and pastoral guidance is a major challenge for academic programmes in the EHEA. At this point, the vast majority of programmes simply lack such a facility. However, creating advisory processes is crucial to making higher education more active and engaging. By supporting students to make choices about their education, advising gives them opportunities to reflect on why they are studying, what their goals are, and which choices will best position them to pursue these goals. Good advice, delivered effectively, can help students develop agency. It also forces them to make their goals, insights and concerns explicit, fostering the ability to communicate with others. Furthermore, much of the advising and deciding process consists of gathering information, weighing it critically and drawing conclusions from it, which promotes analytical thinking. Lastly, the experience of reflectively setting goals, and pursuing them thoughtfully through education, is the basis of all life-long learning.

Part of advising concerns the design of students' curriculum. Many programs require students to study a fixed course of studies. This can be quite disengaging for many students, as they do not feel much ownership of their education. Hence programs should give students more control over what they study, by dedicating more curricular room to electives, majors and minors, or even adopting fully open curricula in which students can design their own curriculum. However, if more open and flexible programmes become common practice, pastoral or academic advising and tutoring practices will become indispensable. Students must be encouraged to reflect on the content and composition of their curriculum. Gradually – in interaction with an academic advisor – students will come to see an explicit connection between their curriculum and their academic and personal development. Student and advisor together build a rationale for the curriculum.

Advising practices are also important beyond the way they help students design their own course of studies. In an activating and engaging education, students must make a range of choices. They must decide, for example, how to manage their time, what study tactics to adopt, how to ensure mental health and wellbeing, and which social and extra-curricular

activities to engage in. In doing so, they shape their own educational experience. Learning how to make good choices, i.e. choices that reflect one's true values and that are based on an informed understanding of the options available, is not easy.

Advising can be provided in several different ways. Institutions can offer forms of faculty advising, in which faculty members act as pastoral tutors and mentors, providing guidance, information, and opportunities for reflection. However, peers can also advise each other, as fellow students are often well-placed to provide suggestions or share experiences. Finally, students can self-advise, as providing students with information about their progress and insight into their personal development can stimulate them to reflect on the choices they have made and how they wish to continue their studies. This invitation to self-reflection can be done through digitised systems, portfolios or other structured forms.

CREATES offers toolkits in all these three categories. CREATES partners have, partly within the framework of the ERASMUS+ project, developed concrete advising practices that academic staff can follow. Additionally, toolkits to aid peer advising (also framed as peer tutoring or peer mentoring) have been developed, which afford both the advisor and the advisees various social, individual and academic benefits (Anderson & Boud, 1996). Finally, CREATES has developed self-advising tools to help students to reflect on their curriculum regularly and to see a clear rationale in the programme of studies they choose for themselves (Löwenstein, 2005), as well as their general educational progress.

Toolkits 2 (Faculty advising), 3 (Peer advising), and 4 (Self-advising) of the CREATES project provide a range of insights, practices and tools that can be used to implement engaging forms of faculty, peer and self-advising.

7 Conclusion

To safeguard the economic, civic and personal futures of the next generation of European citizens, higher education in Europe has a duty to embrace a more student-centred and co-creative educational philosophy and to ensure that the laudable ambitions that have been articulated on all relevant policy levels are actually realised in the day-to-day reality that students experience. The CREATES strategic partnership has operationalised key elements of this philosophy and has provided practical examples and tools that institutions throughout Europe can use to reform their educational practices. While there are many ways of realising a student-centred and co-creative education, these tools provide a useful starting point for modernisation. They have proven their value at the CREATES partners, and they are offered now to the wider higher education sector, with the hope that these approaches to educational design might inspire institutions to incorporate student-centred approaches to education into their strategic plans, adapt CREATES methods through pilot projects, and apply new educational practices throughout their institutions.

However, institutions cannot implement the required educational revolution by themselves. Policymakers at EU, national and sectoral levels, must adopt policies that encourage a shift in higher education culture, in which teaching and learning are at the heart of universities, and in which students are at the heart of teaching and learning. The CREATES policy paper provides several policies that the CREATES partners deem beneficial for realising this.

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